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EXAMINER

LOPEZ, CARLOS N

ART UNIT PAPER NUMBER

1731

DATE MAILED: 08/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/936,916

Applicant(s)

FOTHERINGHAM ET AL.

Examiner

Carlos Lopez

Art Unit

1731

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 July 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) 15-34 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8 is/are rejected.
- 7) ☒ Claim(s) 9-14 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 20 September 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 2 IDS.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

Election/Restrictions

Applicant's election of claims 1-14 in the reply filed on 7/23/04 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Specification

The abstract of the disclosure is objected to because the filed specification contains un-translated words. Correction is required. See MPEP § 608.01(b).

This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Claim 1 is objected to because of the following informalities: Each claim begins with a capital letter and ends with a period. Periods may not be used elsewhere as done in claim 1, or capital letters of the term "IR" as recited in claims 4-5, except for abbreviations. See *Fressola v. Manbeck*, 36 USPQ2d 1211 (D.D.C. 1995). Appropriate correction is required.

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 2, 4, 6, 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

In claim 2, it is unclear which temperature range is being claimed. The claim recites "preferably" but it is unclear if it is an optional limitation or not.

In claim 4, the term "the IR radiators" lacks antecedent basis. Additionally, due to an incomplete translation of claim 4, it is unclear what is being claimed.

For examination purposes claim 4 is being interpreted as reciting that the infrared radiation impinging on the glass is not being absorbed.

In claim 6, the term "the reflected and/or scattered infrared radiation" lacks antecedent basis.

In claim 8, it is unclear if the recited 98% is an optional limitation.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, and 3-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over GB 729,072 ('072) in view of Podvigalkina (US 3,880,632). '072 discloses a method of heating glass and ceramic materials by providing indirect and direct radiation (Line 22ff). It is noted that '072 does not describe the type of radiation used to heat

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glass. However, it is known in the art, as shown by Podvigalkina in claim 5, infrared radiation can be used to heat up glass material to a temperature range of 150°C to 250°C. At the time the invention was made it would have been obvious to a person of ordinary skill in the art to have provided a infrared type radiation as known in the art and shown by Podvigalkina, in order to heat the glass.

The limitation that more than 50% of the radiation impinging the glass is indirect radiation is deemed to occur in the '072 reference. More specifically, since in order to achieve the claimed indirect radiation proportion, applicant, like '072, provides infrared radiators adjacent to reflectors 14 and 15, hence it would be expected that the radiation impinging on the glass of '072 would also be indirect radiation (reflected and scattered) of more than 50% of the radiation output.

As for claim 4, the infrared radiation given by the infrared sources/radiators taught by Podvigalkina would not be expected not to be adsorbed by the glass since the radiation having sufficient energy to heat the glass to 150°C to 250°C would not be expected to be adsorbed by the glass.

As for claim 5, the reflector assembly shown in figure 3 is considered to be an IR radiation hollow.

As for claim 6, reflectors 14 and 15, as show in figure 3, form the walls and or bases for which radiation is reflected.

As for claim 7-8, as noted above since '072 achieves the claimed indirect radiation by providing infrared radiators adjacent to reflectors, it would thus be expected that the

reflected/scattered radiation would be more than the claimed 50%, 90%, 95% or 98% claimed.

Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1,12, and 13 of copending Application No. 09/937,074 ('074). Although the conflicting claims are not identical, they are not patentably distinct from each other because claim 1 of '074, like the instant claim 1, recites applying direct and indirect radiation to ceramic glass and/or glass wherein more than 50% of the total radiation output is acting indirectly onto the ceramic glass and/or glass.

As for instant claim 2, claim 1 of '074 notes that the color temperature of the infrared radiation is more than 1500K.

As for instant claim 3 and 5-6, claim 12 of '074 recites carrying the radiation heating in a radiation hollow, which would reflect and scatter radiation.

As for claim 4, in view that '074 provides the same infrared radiation temperature to glass, it would be expected that that the radiation is not adsorbed by the glass.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Allowable Subject Matter

Claims 9-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: the cited prior art fails to disclose or reasonably suggest process for heating semi transparent and/or transparent glass articles and/or glass-ceramic materials by providing indirect and direct infrared radiation having more than 50% of the total radiation output acts indirectly on the glass and/or glass-ceramic material wherein a component of the indirect radiation is radiation that is adsorbed by a carrier body is converted to heat and giving off to the glass and/or glass-ceramic material that is joined to the carrier body. The cited prior art do not disclose a carrier body per se in contact with the glass and/or glass-ceramic material that would provide the claimed indirect radiation component.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference B and N has been cited to show the state of the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos Lopez whose telephone number is 571.272.1193. The examiner can normally be reached on Mon.-Fri. 8am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Steven Griffin can be reached on 571.272.1189. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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